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EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT PAPER NUMBER

3623

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/751,858

Applicant(s)

SANTOS ET AL.

Examiner

Susanna M. Diaz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This final Office action is responsive to Applicant's amendment filed October 21, 2005.

Claims 1, 7, 12, and 17 have been amended.

Claims 22-26 have been cancelled.

Claims 1-21 and 27 are presented for examination.

2. The previous rejection under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph, is withdrawn in response to Applicant's claim amendments.

### ***Response to Arguments***

3. Applicant's arguments filed October 21, 2005 have been fully considered but they are not persuasive.

Applicant argues the claims as amended, which will be addressed in the revised art rejection found below.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (U.S. Patent No. 6,065,000) in view of Pfeiffer ("Safety Plan Nets Results at Teksid").

Jensen discloses a system for facilitating statistical analysis of events, the system comprising:

[Claim 1] a first input device operable to receive raw data regarding the events, including the nature, place, time, and date of each event, and convert the raw data into formatted data having a suitable electronic format (col. 3, lines 12-15; cols. 9-10, Table 5 (see at least # 20, 22, 29-33, 38); cols. 11-12, Table 6; col. 13, lines 1-12);

a memory storage device operable to store the formatted data (col. 12, line 65 through col. 13, line 14);

a code segment operable to perform date gap analysis and control chart analysis on the formatted data to produce an analysis output (Figs. 5-8, 10, 15, 22, 69, 70 -- Accidents may be graphed or charted based on frequency by day of week, time of day, and over a given period of time, such as a month, year, or specified date range; Figs. 31, 42, 43 -- An assessment of appropriate corrective actions to be taken can be recorded and displayed as an analysis output);

a display device operable to display the analysis output (Figs. 31, 42, 43 -- An assessment of appropriate corrective actions to be taken can be recorded and displayed as an analysis output); and

a second input device operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected

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from the display (Fig. 43; col. 3, lines 12-15; col. 13, lines 1-12 -- A user may access additional information regarding a particular incident. For example, Fig. 43 shows a "Performance Analysis" section that summarizes accidents associated with a given individual. "Advanced Investigation," i.e., further analysis, may also be requested);

[Claim 3] the events involving employee illness and injury (cols. 9-10, Table 5; cols. 11-12, Table 6; col. 13, lines 1-12);

[Claim 4] the analysis output being displayed in a chart format (Figs. 31, 42, 43 -- An assessment of appropriate corrective actions to be taken can be recorded and displayed as an analysis output. The specific corrective action entered is displayed in the row labeled "Corrective Action"; therefore, this display of data is a type of mini chart);

[Claim 6] the second input device being selected from the group consisting of: computer mice, trackballs, light pens, touch sensitive screens, keyboards (col. 3, lines 12-15; col. 13, lines 1-12).

As per claim 1, Jensen provides various examples of date gap analysis and control chart analysis. Jensen also allows information regarding corrective actions responsive to workplace incidents to be recorded and displayed; however, Jensen does not expressly teach that a code segment makes workload adjustments based on these analyses. Official Notice is taken that it is old and well-known in the art of workplace management to adjust workloads accordingly in response to dangerous working conditions. For example, an increase in the frequency of accidents and/or dangerous

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work-related decisions being made by overworked doctors, nurses, truck drivers, etc. have led safety proponents in each respective industry to push for a lower limit on the number of consecutive hours an employee may work. This is an example of a workload adjustment being made in response to analysis of workplace-related injury and accident statistics. Similarly, Jensen is directed toward analysis of workplace-related injury and accident statistics in order to better monitor these incidents for accurate reporting to safety governing bodies, such as OSHA (abstract); therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Jensen to generate corrective actions involving workload adjustments in order to extend the usefulness of Jensen's invention to industries where many workers are negatively affected by poor workload conditions, thereby making Jensen's invention more versatile, comprehensive, and effective in its ability to promote safer working environments. Furthermore, the Examiner asserts that the computer automation of a well-known manual process is old and well-known in the art. Computer automation of a well-known manual process facilitates more rapid, efficient, and accurate performance of the process in comparison to the same process performed entirely by hand. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Jensen's computer system code segment to make the workload adjustments based on date gap analysis and control chart analysis in order to facilitate more rapid, efficient, and accurate performance of the workload adjustments as opposed to if they were performed entirely by hand.

Furthermore, as per claim 1, Jensen does not expressly disclose that its computer-executed date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, wherein the output includes a value for each elapsed time and a value for each average elapsed time. However, looking at Jensen's graphs, it is clear that accidents may be graphed or charted based on frequency by day of week, time of day, and over a given period of time, such as a month, year, or specified date range (Figs. 5-8, 10, 15, 22, 69, 70). For example, Fig. 8 lists specific events and corresponding dates of occurrence. Figs. 69 and 70 allow a user to view accident reports based on the frequency by day of the week or frequency by time of the day. Fig. 8 even isolates specific events and identifies the date of occurrence, thereby lending itself to an understanding of the lapse of time between the specific events. Pfeiffer discusses Teksid Aluminum Foundry Inc.'s Safety and Health Program that has been implemented to reduce incident rates (§ 1). This program serves as a model to improving work safety, especially in light of the goals of OSHA (§ 12). As part of this program, Teksid Aluminum Foundry Inc. "displays recordable incidents per month and days since the last lost time incident throughout the plant" (§ 12). Both Jensen and Pfeiffer are directed toward improving workplace safety, especially in light of OSHA requirements. Furthermore, as discussed above, Jensen automates the collection of data needed to calculate lapse of time between specific events; therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art to modify Jensen to determine an elapsed time between consecutive events, wherein the output includes a value for each elapsed time in order

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to facilitate implementation of a safety program that alerts workers to the days that have passed since the last incident in order to provide these workers with a concrete goal to surpass in an effort to improve workplace safety, as suggested by Pfeiffer. Additionally, Official Notice is taken that it is old and well-known in the art to utilize a computer to automatically perform a well-known calculation in order to more rapidly complete the calculation while reducing errors commonly introduced by human intervention.

Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to utilize a computer, programmed with the proper code segments, to perform this step of determining an elapsed time between consecutive events, wherein the output includes a value for each elapsed time in order to more rapidly complete the calculation while reducing errors commonly introduced by human intervention.

Further addressing claim 1, Pfeiffer also touts that "TAF worked nearly 2,000,000 hours without a lost time incident and has reduced recordable incidents from 379 in 1994 to 73 in 1997. This incident rate is approximately one half of the foundry industry average in the United States" (§ 15). Clearly, meeting certain industry expectations (e.g., in relation to an average incident rate) establishes an important benchmark by which companies measure themselves. Therefore, in line with the reasoning presented above, the Examiner further submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Jensen to determine an average elapsed time (presumably between consecutive events, although this is not expressly claimed), wherein the output includes a value for the average elapsed time in



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order to facilitate implementation of a safety program that alerts workers to the days that have passed since the last incident in order to provide these workers with a concrete industry-based goal to surpass in an effort to improve workplace safety, as suggested by Pfeiffer. Also, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to utilize a computer, programmed with the proper code segments, to perform this step of determining an average elapsed time, wherein the output includes a value for the average elapsed time in order to more rapidly complete the calculation while reducing errors commonly introduced by human intervention.

Regarding claim 2, Jensen's system receives accident reports as users enter them, which may or may not be daily. Accident reports are only entered when accidents occurs; therefore, if accidents did not occur daily, then reports would likely not be entered daily. On the other, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention for Jensen's input device to receive data on a daily basis in order to maintain an accurate and updated account of incidents, especially at a location(s) where reportable incidents occur on a daily basis.

As per claim 5, Jensen displays analysis output in a graphical format, such as a chart format; however, Jensen does not expressly teach that the analysis output may be displayed in a tabular format. Official Notice is taken that it is old and well-known in the art to display data in a tabular form in order to meet the needs of users who prefer their reported data organized and selectable by tabs. Therefore, the Examiner asserts that it

would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to provide Jensen's users with the option of having the analysis output displayed in a tabular format in order to meet the needs of users who prefer their reported data organized and selectable by tabs.

[Claims 7-11] Claims 7-11 recite limitations already addressed by the rejection of claims 1-6 above; therefore, the same rejection applies.

Furthermore, as per claim 9, the fact that Jensen can filter and sort data by date, incident types, etc. is indicative of the fact that Jensen's invention inherently comprises code segment for separating data into a plurality of data sets based upon a predetermined separation criteria.

[Claims 12-16, 27] Claims 12-16 and 27 recite limitations already addressed by the rejection of claims 1-11 above; therefore, the same rejection applies.

Additionally, in reference to claim 27, the rejection of claim 1 states, "Official Notice is taken that it is old and well-known in the art of workplace management to adjust workloads accordingly in response to dangerous working conditions. For example, an increase in the frequency of accidents and/or dangerous work-related decisions being made by overworked doctors, nurses, truck drivers, etc. have led safety proponents in each respective industry to push for a lower limit on the number of consecutive hours an employee may work. This is an example of a workload adjustment being made in response to analysis of workplace-related injury and accident

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statistics.” The Examiner submits that “correlating a number of events with a number of working employees to determine if the number of events is proportional with the number of working employees” (claim 27) is an old and well-known approach to making workload adjustments. Continuing with the aforementioned examples, if doctors, nurses, truck drivers, etc. are determined to be overworked based on the frequency of accidents, or events, then it is common practice to limit the hours consecutively worked by these types of workers. However, this limit requires that a larger number of employees be assigned to work overall in order to cover the needed shifts, hours, distances, etc. Therefore, using the same line of reasoning that is presented above in the rejection of claim 1, the Examiner asserts that it also would have been obvious to one of ordinary skill in the art at the time of Applicant’s invention to modify Jensen to correlate a number of events with a number of working employees to determine if the number of events is proportional with the number of working employees (claim 27) in order to extend the usefulness of Jensen’s invention to industries where many workers are negatively affected by poor workload conditions, thereby making Jensen’s invention more versatile, comprehensive, and effective in its ability to promote safer working environments.

[Claims 17-21]        Claims 17-21 recite limitations already addressed by the rejection of claims 1-11 above; therefore, the same rejection applies.

Furthermore, as per claim 21, Jensen discloses that different data sets may be analyzed and displayed in resulting charts. For example, Fig. 43 displays a mini chart

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corresponding to "Accident History," another mini chart corresponding to "Performance Analysis," another one showing "Corrective Action Assigned to," etc. All of these mini charts are displayed simultaneously and are representative of different data sets.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Clark (U.S. Patent No. 6,889,196) -- Discloses a system that assists an employee in scheduling tasks to be worked on, taking into account the likelihood of the employee having a family emergency incident in relation to the overall average of all employees.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 10 am - 6 pm.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Susanna M. Diaz  
Primary Examiner  
Art Unit 3623

November 19, 2005